

Module 9

Equity and community resources

Basic concepts

This section is about interventions to address inequity in chronic disease both globally and in Australia. We also explore the mobilisation of community resources in the prevention and management of chronic diseases.

Learning objectives



By the end of this section you will be able to:

- Identify inequities in chronic disease amongst populations groups both globally and in Australia
- Identify interventions to address inequities in chronic disease both globally and in Australia
- Describe the use of community resources to address the prevention and management chronic illness

9.1 Inequities in chronic illness

Health inequities are systematic differences in health status between different groups in the population, which arise because of socio-economic factors and are potentially avoidable and unjust. The World Health Organization defines health equity as “*the absence of unfair and avoidable or remediable differences in health among populations or groups defined socially, economically, demographically or geographically*” [1]

In Australia

In Australia there is a strong, continuous socioeconomic gradient in the rates of chronic disease. These trends are even more pronounced for mortality.

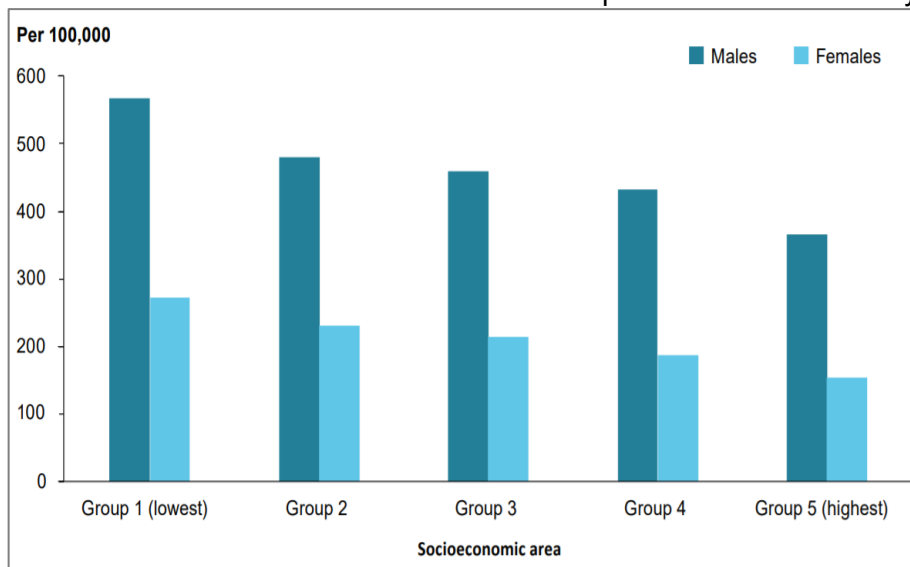


Figure 1: Incidence of heart attack in Australia by index of socioeconomic disadvantage [2]

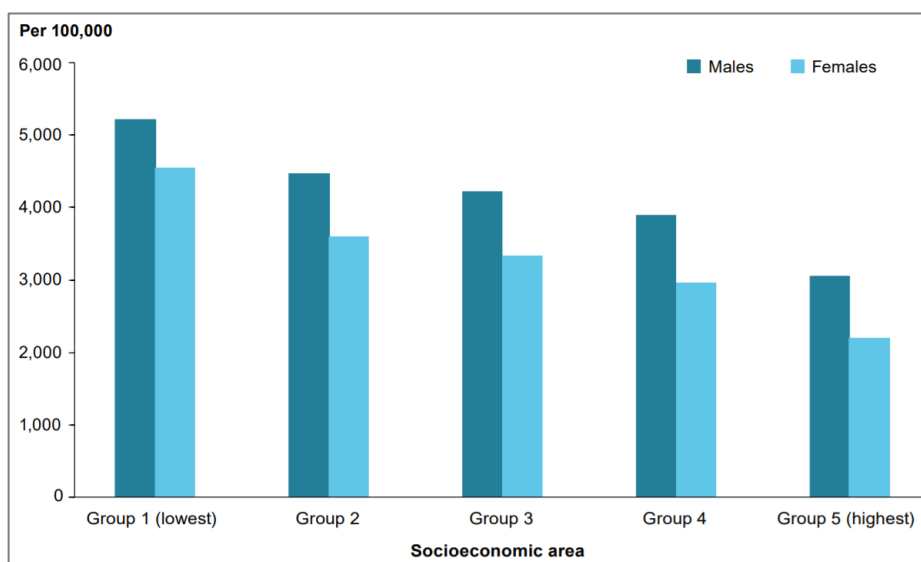


Figure 2: Prevalence of diabetes in Australia by index of socioeconomic disadvantage, 2016 [2]

The inequalities for patients with multiple comorbidities are equally as pronounced. In 2011-12 people from the lowest SES group were almost four times as likely to have all three of cardiovascular disease, diabetes and chronic kidney disease as those from high SES groups [3].

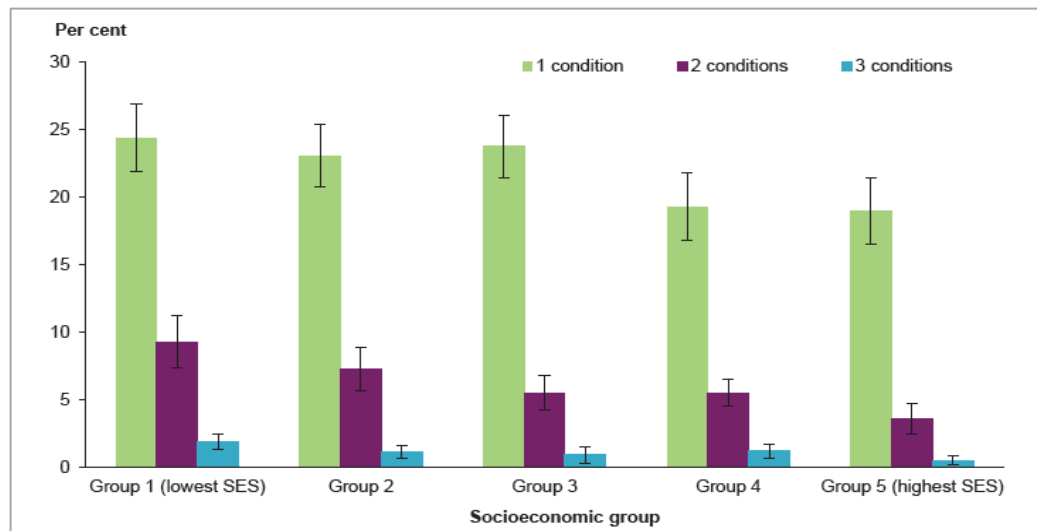
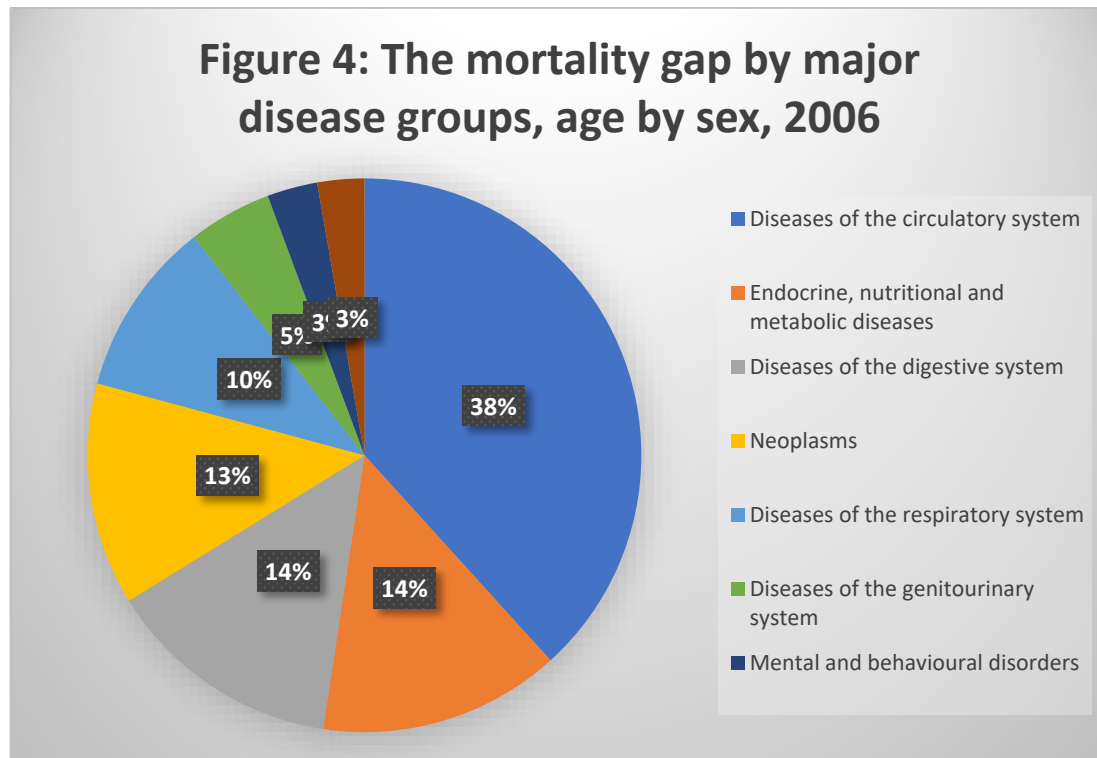


Figure 3: Prevalence of comorbidities for CVD, diabetes and CKD for people aged 18 years and over by SES, 2011-12 [3]

The most important inequity is the health of Aboriginal and Torres Strait Islander Australians. About 80% of the mortality gap between Indigenous and other Australians aged 35–74 years is due to chronic diseases [4]. The Standardised Mortality Ratios (Indigenous compared to non-Indigenous) for 2009-2011 for cardiovascular disease was 1.3 times higher for Aboriginal and Torres Strait Islander Australians compared to other Australians, 2.8 times higher for chronic kidney disease and 2.7 times higher for diabetes. Indigenous Australians suffer an overall burden of disease that is 2.5 times that of the total Australian population two thirds of which is due to chronic illness [5]. Indigenous Australians continue to experience poor access to health care despite higher levels of morbidity [6].



There are also strong inequalities in the risk factors for chronic disease including smoking and obesity [7]. People from the most disadvantaged quintile are more likely to smoke, exercise less, be overweight or obese, and have few or no daily serves of fruit or vegetables each day [8]. These inequalities in health are predominantly caused by psychosocial processes and health behaviours that are in turn associated with poverty, lack of access to education and work, poor working conditions, poor housing and physical environment, and exclusion from social resources and power [9].

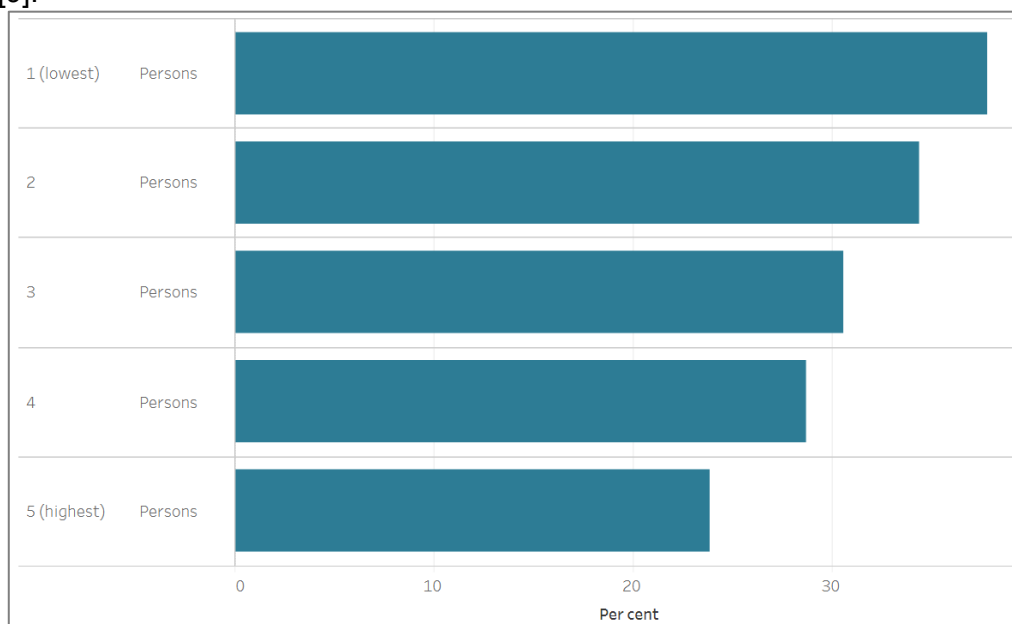


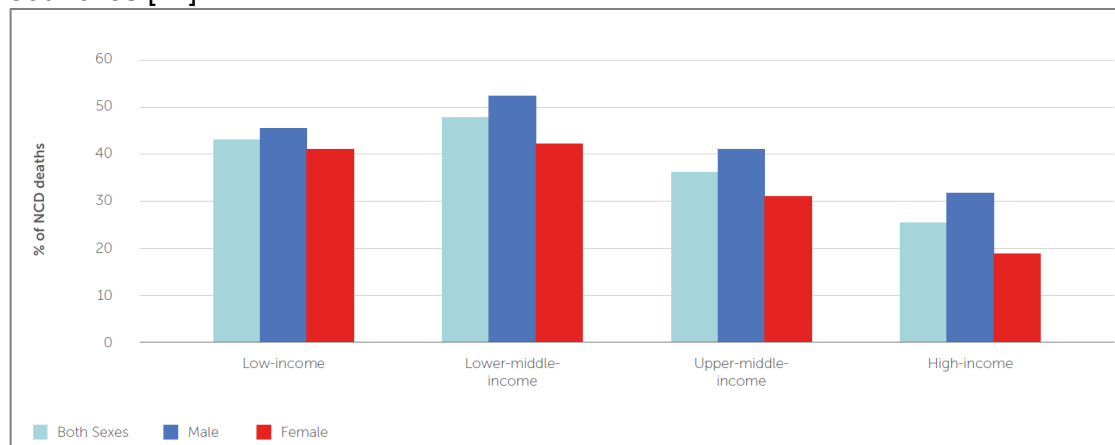
Figure 5: Proportion of adults with obesity by socioeconomic status 2017-18. [10]

These health inequalities may be compounded by the influence of diverse cultural background and migration experience. In addition, population-based preventive interventions themselves may also contribute to health inequality because of higher uptake among affluent groups.

Globally

The rapidly increasing burden of chronic diseases affects the poor and disadvantaged, contributing to widening health gaps between and within countries [11]. Chronic disease is rising most quickly in less developed economies especially in Asia and the cost of chronic illness is contributing to poverty in many countries through loss of employment, catastrophic costs of health care and so forth.

Figure 6: Proportion of NCD mortality under 60 years by income group of countries [12]



9.2 Addressing inequities

Strategies that have been shown to be effective in reducing health inequalities include outreach services, reducing cost and other barriers to access, developing culturally appropriate services, and increasing access to skills and resources that will enable people to adopt more health promoting lifestyles [13].

Improving acceptability services involves consulting with the local community and community organisations, working with Aboriginal health workers and ethnic health workers, including interpreters. A study to identify factors that enhanced the capacity of Divisions of General Practice to develop diabetes programs with Indigenous communities found that having a population rather than patient approach, active involvement of local community controlled health services or community organisations and a willingness to move at the pace set by the community were key features of successful programs [14].

In the UK, the provision of practice nurses to work in practices located in disadvantaged communities improved preventive care targets [15]. In the US, nurse-led clinics for disadvantaged patients with chronic disease have achieved significantly better outcomes than usual care [16]. A community nurse program for Canadian First-Nation people decreased blood pressure in diabetic and hypertensive patients [17].

Cost to the consumer is a major barrier to access of PHC services by disadvantaged groups. This barrier is greatest for those patients on the lowest incomes because of their lower disposable income. It may also be more important when illness occurs suddenly or causes loss of income. Costs include not only the costs of attending PHC services but associated costs (e.g. transport, time off work) and “downstream costs” (such as costs of investigations, prescription drugs, allied health services and specialist referrals).

The Audit and Best-practice for Chronic Disease (ABCD) project in Aboriginal and Torres Strait Islander community health centres in the Northern Territory and Queensland aims to improve their primary care systems for chronic illness care and preventive care based on the Chronic Care Model through organisational assessment and clinical audit feedback to staff on their performance in providing quality of care for patient with chronic illness. This has achieved greater improvements for chronic illness care than in prevention [18].

Learning Activity 1



Look at *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease*, from the Centers for Disease Control and Prevention – Division of Community Health (2013).

<http://www.cdc.gov/nccdphp/dch/pdf/HealthEquityGuide.pdf>

What are the range of strategies for addressing health equity in the prevention and management of chronic disease?

9.3 Mobilising community resources

Community programs can support prevention and expand a health system's care for chronically ill patients. However, some organisations may be reluctant to engage due to the necessary time commitment, the staff skills needed, the ability to demonstrate effectiveness and concerns about the effort becoming unmanageable. This may be partly addressed by developing community engagement plans which describe the role of each organisation [19].

In prevention

In prevention community organisations can help provide interventions to support lifestyle change. For example in Australia, a number of local government authorities have provided exercise referral programs in conjunction with leisure centres operated by the Council [20].

In the US, WISEWOMAN is a multi-component intervention coordinated by the Centres for Disease Control and prevention (CDC) that provides screening of risk factors for cardiovascular disease and other chronic diseases and lifestyle interventions based on the 5As approach. WISEWOMAN uses a socio-ecological

model [21] to identify partners at individual, organisational, community and state levels, and tailors interventions to the target populations and settings in establishing local projects [22]. A number of these programs are with native American community groups. This has demonstrated cost effective interventions for improving preventive care in disadvantaged groups [23, 24].

In care for chronic illness

In Australia, there is considerable involvement of community and non-government organisations in self-management support for patients with chronic disease. Examples of these programs include various on-line resources by the Lung Foundation and National Heart Foundation. South West Sydney Primary Health Network has self-management support for people with diabetes in both English and Arabic languages. See <https://www.swsphn.com.au/diabetessupporttool>

Learning Activity 2



Look at the CDC WISEWOMAN site. What are some of the partnerships developed to support preventive care in disadvantaged communities? <http://www.cdc.gov/wisewoman>

9.4 Community Development

There are many examples of community development and participatory approaches to the prevention and management of chronic conditions in Australia. These approaches attempt to not only enlist community resources for health improvement but also to engage the community in addressing some of the social determinants of health.

Community development approaches have been widely applied in Aboriginal communities and have been successful in engaging communities [25]. Despite this Campbell et al identified only 17 published studies in which community empowerment was an explicit objective [26].

Community health workers

One of the important methods for engaging communities has been the employment of community health workers (CHWs) from the communities themselves who are given training as health workers. The Community Preventive Services Task Force (CPSTF) in the USA conducted a systematic review of community health workers finding that they were one of the most effective interventions for prevention of cardiovascular disease and diabetes [27]. In many interventions overseas CHWs provide tailored coaching, social support, advocacy, and navigation to patients with long term conditions from disadvantaged groups or ethnic minorities [28].

In Australia these have been widely implemented as Aboriginal Health Workers and Bilingual Community Educators (BCEs) [29, 30]. Aboriginal Health Workers have a

comprehensive range of roles. However, BCEs have roles that are more focused on education rather than adding to individual care provided by other workers.

Learning Activity 3



In Sydney there have been efforts to mobilise CALD communities in Canterbury local government area in a joint program run by the Local Health District and Primary Health Network. Look at the evaluations and resources and those activities that have been applied to dealing with long-term conditions. <https://www.cesphn.org.au/programs/can-get-health>

Suggested further reading



Community Preventive Services Taskforce (web page)
<https://www.thecommunityguide.org/task-force/what-task-force>

NSW Department of Health, 2004. NSW Health and Equity Statement: "In all fairness".
http://hiaconnect.edu.au/old/files/NSW_Health_and_Equity_Statement.pdf

US Centre for Chronic Disease Control and Prevention: Health Equity (web page).
<http://www.cdc.gov/chronicdisease/healthequity/index.htm>

World Health Organization, 2005. Preventing chronic diseases: a vital investment: WHO global report.
http://www.who.int/chp/chronic_disease_report/en/

References

1. Solar, O. and A. Irvin, *Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health*. 2007, Commission on Social Determinants of Health, World Health Organization: Geneva.
2. Australian Institute of Health and Welfare, *Indicators of socioeconomic inequalities in cardiovascular disease, diabetes and chronic kidney disease*. Cat. no. CDK 12. 2019, Canberra: AIHW.
3. Australian Institute of Health and Welfare, *Cardiovascular disease, diabetes and chronic kidney disease - Australian facts: Prevalence and incidence*. Cat. no. CDK 2. 2014, AIHW: Canberra.
4. Australian Institute of Health and Welfare, *Contribution of chronic disease to the gap in adult mortality between Aboriginal and Torres Strait Islander and other Australians*. Cat. No. IHW 48. 2010, AIHW: Canberra.
5. Australian Institute of Health and Welfare, *Australia's health 2010. Australia's health series no. 12*. Cat. no. AUS 122. 2010, AIHW: Canberra.
6. Australian Institute of Health and Welfare, *Access to primary health care relative to need for Indigenous Australians*. 2014, Australian Institute of Health and Welfare: Canberra.

7. Glover, J.D., D.M. Hetzel, and S.K. Tennant, *The socioeconomic gradient and chronic illness and associated risk factors in Australia*. Aust New Zealand Health Policy, 2004. **1**(1): p. 8.
8. Turrell, G., et al., *Health inequalities in Australia: Morbidity, health behaviours, risk factors and health service use*. 2006, Australian Institute of Health and Welfare: Canberra.
9. World Health Organization, *Closing the Gap in a Generation. Commission on Social Determinants of Health Final Report*. 2008, WHO: Geneva.
10. Australian Institute of Health and Welfare. *Overweight and obesity: an interactive insight. Web Report. Cat. no: PHE 251*. 2019 19 Jul 2019 31 July 2019]; Available from: <https://www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity-an-interactive-insight/contents/differences-between-groups>.
11. World Health Organization, *Preventing chronic diseases: a vital investment*. 2005, WHO: Geneva.
12. World Health Organization, *Noncommunicable diseases country profiles 2018. Licence: CC BY-NC-SA 3.0 IGO*. 2018, WHO: Geneva.
13. Gekpens, A. and L. Gunning-Schepers, *Interventions to reduce socioeconomic health differences: a review of the international literature*. European J of Public Health, 1996. **6**: p. 218-226.
14. Lee, P, et al., *National Divisions Diabetes Program. Optional Module 1. Part A. Aboriginal and Torres Strait Islander Populations*. 1999, Centre for General Practice Integration Studies and Centre for Health Equity Training Research and Evaluation,UNSW: Sydney.
15. Baker, D. and E. Middleton, *Cervical screening and health inequality in England in the 1990s*. J Epidemiol Community Health, 2003. **57**(6): p. 417-23.
16. Davidson, M.B., *Effect of nurse-directed diabetes care in a minority population*. Diabetes Care, 2003. **26**(8): p. 2281-7.
17. Tobe, S.W., et al., *Effect of nurse-directed hypertension treatment among First Nation people with existing hypertension and diabetes mellitus* Canadian Medical Association Journal, 2006. **174**: p. 9.
18. Si, D., et al., *Delivery of preventive health services to Indigenous adults: response to a systems-oriented primary care quality improvement intervention*. Med J Aust, 2007. **187**(8): p. 453-7.
19. Centers for Disease Control and Prevention, *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease*. 2013, US Department of Health and Human Services: Atlanta.
20. Shire GPs. *The Sutherland Division of General Practice GP Exercise Referral Scheme*. 2006; Available from: <http://www.shiregps.org.au/documents/Research%20Study%20Report%20060709.pdf>.
21. Sorensen, G., et al., *Model for incorporating social context in health behavior interventions: applications for cancer prevention for working-class, multiethnic populations*. Prev Med, 2003. **37**(3): p. 188-97.
22. Will, J. and R. Loo, *The WISEWOMAN program: reflection and forcast*. Preventing Chronic Disease, 2008. **5**(1-9).
23. Finkelstein, E., O. Khavjou, and J. Will, *Cost-Effectiveness of WISEWOMAN, a Program aimed at reducing heart disease risk among low-income women*. Journal of Womens Health, 2006. **15**: p. 379-389.
24. Will, J.C., et al., *Health promotion interventions for disadvantaged women: overview of the WISEWOMAN projects*. J Womens Health, 2004. **13**(5): p. 484-502.
25. Tsey, K., et al., *Indigenous Men Taking Their Rightful Place in Society? A Preliminary Analysis of a Participatory Action Research Process with Yarrabah Men's Health Group*. Australian Journal of Rural Health, 2002. **10**(6): p. 278-284.
26. Campbell, D., P. Pyett, and L. McCarthy, *Community development interventions to improve Aboriginal health: Building an evidence base*. Health Sociology Review, 2007. **16**(3-4): p. 304-314.
27. Community Preventive Services Task Force. *Cardiovascular Disease: Interventions Engaging Community Health Workers*. 2015 13.10.2016]; Available from:

- <https://www.thecommunityguide.org/findings/cardiovascular-disease-prevention-and-control-interventions-engaging-community-health>.
28. Kangovi, S., D. Grande, and C. Trinh-Shevrin, *From rhetoric to reality—community health workers in postreform U.S. health care*. *N Engl J Med.*, 2015. **372**(24): p. 2277-2279.
 29. Mitchell, M. and L.M. Hussey, *The Aboriginal health worker*. *Med J Aust*, 2006. **184**(10): p. 529-30.
 30. South West Sydney Local Health District. *Bilingual Community Education Program*. 2016 [13.10.2016]; Available from: http://www.sectorconnect.org.au/assets/pdf/resources/news/130917_Bil.pdf.